UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/443,779	11/19/1999	SU CHIN CHANG	13237-2495	7712

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EXAMINER
SPOONER, LAMONT M

ART UNIT	PAPER NUMBER
2626	

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Office Action Summary	Application No.	Applicant(s)
		09/443,779	CHANG ET AL.
		Examiner	Art Unit
		Lamont M. Spooner	2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 September 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17,20-23,32 and 33* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17,20-23,32 and 33* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>19 November 1999</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 09/29/06 have been fully considered but

they are not persuasive.

More specifically, in regards to claim 1, applicant states, page 8, "By

allowing the developer who is debugging the parse tree to view

alternate rules, which are alternates to the rule applied in generating

an improper constituent, the present system speeds ..." The

Examiner notes, what as claimed, any alternate rules, see claim 1,

lines 10 and 11, "the display items including alternate rules, other

than the rules used in generating the constituent at the selected

connecting point." The Examiner notes "any" rules, other than rules

used in generating the constituent, are appropriate as claimed, see

previous rejection, wherein applicant's argued, "candidate rules" are

appropriate as the claim does not specify any particular rules (i.e.

rules directed towards generating a constituent). Thus applicant's

further arguments, p.9 "Therefore, those definitions can only be

considered as candidate definitions because no definition has yet

been used. They cannot be considered alternate definitions which are

alternates to a definition that has already been used in generating the

parse." The Examiner cannot concur, for the parse was inherently

initiated with a current rule in order to determine dirty was not

recognized, which inherently passes dirty through the parsing

process, which includes an inherent parsing rule, rendering

applicant's arguments unpersuasive. The Examiner further notes the

determination of whether a rule was applied to form a constituent at a

connecting point is inherent, wherein the Examiner notes that forming

a constituent inherently requires a rule, and the determination of

whether a rule was applied, is inherent to the multiple paths in

followed in the determining of a constituent (see previous rejection,

Figs. 8a, Fig. 14, Fig. 19, note in Fig. 8a and C.36, lines 43-C.37.line

25-several rules are applied, which inherently requires a

determination of whether a rule was applied in order for recursive

calls applying different rules).

Claim Objections

2.   Claim 1 is objected to because of the following informalities:

In claim 1, line 7, "ruler" should probably be - -rule- -. Appropriate

correction is required.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in

this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4.   Claims 1-9 rejected under 35 U.S.C. 102(b) as being anticipated by

Loatman (US 4,914,590).

As per **claims 1, 7, 8**, Loatman et al teach a method for analyzing

and debugging natural language parses, comprising (figures 8A-16B):

"Displaying a parse tree for a textual input, the parse tree being

generated based on rules and comprising at least one connecting point

having two children" (figure 8a, col. 36, lines 2 1-55, the complex sentence

"Reagan warned... the strait" is parsed and the parse tree shown in figure

8a);

"Receiving control input selecting one of said connecting points as a

selected connecting point" (col. 36, line 56 to col. 37, line 25, a graphic

debugging tool that is displayed allows the user to interact with the output

of the parse and to select a node (connecting point) of the parse tree); col.

17, line 1 to col. 22, line 56, his system browser);

"Determining whether a rule was applied to form a constituent was

formed at said connecting point" (col. 37, lines 7-25, the leaf nodes

represent the individual words of input which have been morphologically

analyzed, the Examiner notes that forming a constituent inherently requires

a rule, and the determination of whether a rule was applied, is inherent to

the multiple paths in followed in the determining of a constituent, Figs. 8a,

Fig. 14, Fig. 19, note in Fig. 8a and C.36, lines 43-C.37.line 25-several

rules are applied, which inherently requires a determination of whether a

rule was applied in order for recursive calls applying different rules); and

"if the determination is positive, displaying a plurality of display items

proximate to said selected connecting point" (col. 37, lines 14-25, the user

has bugged the node which hold the parse of the clause and a menu of that

clause is displayed).

"the display items including alternate rules, other than the rules used

in generating a constituent at the selected connecting point" (Fig 9B-his

FO933 variables menu as proximate, also Fig. 19-his verification of the

parse for "dirty" interpreted also as alternate rules, C.45.lines 65-68-his

return to parse, C.45.lines 20-64-his menu, Fig. 14, <u>his menu of items</u>

<u>interpreted to include alternate rules other than rules used in generating a</u>

<u>constituent at the selected connecting point</u>).

As per **claim 2**, Loatman et al teach "receiving control input one of

said plurality of menu..." (figures 10a-10b, the user interact with three

window, col. 37, lines 30-54, col. 17, line 1 to col. 22, line 56, his system

browser in particular section 2- 4. 1.3, col. 2 1, lines 37-48 that recites

pressing the right button, bring s a menu of graph editing options where a

link / node can be deleted);

"In response to receiving said control input for deleting said

constituent , deleting said constituent" (col. 21, lines 35-47, a node is

deleted accordingly).

As per **claim 3**, Loatman et al teach receiving control input for

selecting one of said plurality of display items for deleting said parse tree"

(col. 22, lines 48-57, the DeleteLink Fn prompts for the From and To nodes

from which delete the link and the graph (parse tree)).

"In response...deleting constituent formed at each connecting point in

said parse tree" (col. 22, lines 48-59).

As per **claim 4**, Loatman et al teach "receiving control input selecting

..displaying information regarding said children of said selected connecting

point" (figures 43A through 43D, col. 31, line 64 to col. 32, line 50,

particularly col. 32, lines 18-24);

"Displaying information regarding said children of said selected

connecting point" (figures 43A through 43D, col. 31, line 64 to col. 32, line

50, particularly col. 32, line 18-24, his system browser can display all the

parse showing the links (nodes) of parent and children).

As per **claim 5**, Loatman et al teach displaying a first plurality of

menu ... identifying a grammar rule applied at said selected point to form

constituent" (col. 38, line 35 to col. 40, line 2 his grammar development

example).

As per **claim 6**, Loatman et al further teach wherein said control input

selecting one of said connecting points as a selected connecting point

comprises: "

Receiving input from an input placing a pointer of a user interface

proximate to one of said connecting point" (col. 17, lines 1-50, the user

selects any displayed node to be operated on with a browser windows that

acts as menus); and

"receiving input representing an enabled state for the control of the

input device" (col. 17 , lines 1-40),.

As per **claim 9**, Loatman et al teach determining whether a

constituent was formed at said selected connecting point comprises

determining whether a rule was successfully applied at said selected

connecting ..." (Col. 37, line 65 to col. 38, , line 20).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the

basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 10-17, 20-23, 32 and 33 rejected under 35 U.S.C. 103(a) as

being unpatentable over (Loatman, US 4,914,590).

Claim 10 recites the limitations of claim 1 (see rejection of claim 1

above), and further recites the menu items including an alternate grammar

rule display items which when activated, displays alternate grammar rules

comprising grammar rules that are alternates to the rule applied in

generating the constituent formed at the selected connecting point in the

parse tree (fig. 19 his verification of the parse of dirty-those rules were not

applied at all, thus interpreted as not successfully applied, once chosen

they may be applied, successfully or unsuccessfully), but lacks, displaying

a plurality of display items <u>proximate</u> to said selected connecting point,

<u>wherein</u>, the display items including alternate rules, other than the rules

used in generating a constituent at the selected connecting point.

However, the Examiner notes that having a menu proximate to a

selected node is evidenced by Loatman (Fig. 14 and Fig. 9b). Therefore, at

the time of the invention, it would have been obvious to modify the

embodiment of Fig. 9b with the embodiment of Fig. 19, his menu. The

motivation for doing so would have been to view a menu near a selected

item (such as a node being debugged/edited, etc.).

As per **claim 11**, Loatman et al teach receiving control selecting one

of said plurality of menu items (col. 17, line 1 to col. 22, line 57, his system

browser wherein when a node is selected, menus are displayed relate to

examining and modifying things, provide database search and edit the

window's graph);

"in response to receiving user input...displaying a second plurality of

menus item proximate to said plurality of menu items" (col. 17, lines 52-61,

a menu of the object slot is displayed , then when a slot is selected a menu of its facets will pop up).

As per claims **12- 16**, Loatman et al teach receiving control input selecting, activating the alternate grammar rules display item... connecting point; (figure 9b, Fig. 19),. and

"displaying a first group of rules comprising all of the rules that may be applied at said selected connecting point of said constituents of said connecting point" (figure 9b, col. 11, line 10 to col. 12, line 12).

As per claims **17, 20-23 and 32-33**, Loatman et al teach receiving control input activating the alternate grammar rules display items for displaying a group of alternate rules applied at said selected connecting point that did not successfully form a constituent at said selected connecting point and displaying of alternate rules (see claim 1 positive determination discussion, claim 1 and 10 alternative rules not applied discussion, also figure 9b-his z as the bug point, Fig. 19-his "dirty not recognized" and verification as successful and unsuccessful determination, col. 45, lines 21-68, -wherein the rules are included in his alternate rules, and the determination is deemed unsuccessful, thus prompting the dirty not being recognized).

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

-    Stuckey (US 5,721,938) teaches analyzing the parse of a natural language sentence allowing the analyzer to view all possible combinations of constituents.

8.   Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory

period for reply expire later than SIX MONTHS from the date of this final

action.

9.   Any inquiry concerning this communication or earlier communications

from the examiner should be directed to Lamont M. Spooner whose

telephone number is 571/272-7613. The examiner can normally be

reached on 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Richemond Dorvil can be reached on 571/272-

7602. The fax phone number for the organization where this application or

proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained

from the Patent Application Information Retrieval (PAIR) system. Status

information for published applications may be obtained from either Private

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(EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated

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1000.

lms
11/28/06

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